

**PERIODIC PATTERNS AND TECHNIQUE TO CONTROL
MISALIGNMENT BETWEEN TWO LAYERS**

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ABSTRACT OF THE DISCLOSURE

10 A method and system to measure misalignment error between two overlying or
interlaced periodic structures are proposed. The overlying or interlaced periodic
structures are illuminated by incident radiation, and the diffracted radiation of the incident
radiation by the overlying or interlaced periodic structures are detected to provide an
output signal. The misalignment between the overlying or interlaced periodic structures
may then be determined from the output signal.